

Amendments to the Claims:

This listing of claims will replace all prior versions, and listings, of claims in the application.

Listing of Claims:

Please cancel Claims 1-16 in favor of the following new claims.

Claim 17. (New) A method for separating zeolite crystals from an aqueous medium, comprising:

(a) preparing an aqueous alkaline mother liquor containing alumina and silica precursors and optionally an organic templating agent;

(b) hydrothermally treating said mother liquor thereby obtaining a suspension containing zeolite crystals, silicates or amorphous silica aluminate and optionally (i) organic templating agent and product generated by decomposition of the organic templating agent and optionally (ii) alcohol derived by the decomposition of said silica and alumina precursors;

(c) treating the alkaline zeolite crystal containing suspension with an acid until the suspension attains a pH ranging from 3-8; and

(d) filtering or decanting the resulting mixture to isolate the zeolite crystals.

18. The process according to Claim 17, which further comprises:

in step (c) treating the suspension with said acid and with a material selected from the group consisting of a clay, an oxide and a precursor of an oxide which generates the oxide by hydrolysis; and

in step (d) filtering or decanting the resulting mixture to isolate said zeolite crystals in

a mixture with the oxide.

19. The process according to Claim 17, wherein said acid of step (c) is an acid precursor which is capable of simultaneously generating an acid and a ligand by hydrolysis.

20. The process according to Claim 17 wherein said pH ranges from 3 to 6.

21. The process according to Claim 17, wherein said acid is selected from the group consisting of acetic acid, hydrochloric acid, nitric acid, formic acid, propionic acid and oxalic acid.

22. The process according to Claim 18, wherein said oxide is selected from the group consisting of silica, silica-alumina and alumina.

23. The process according to Claim 18, wherein said precursor of an oxide is selected from the group consisting of aluminum acetylacetonate, alkylaluminates, alkylsilicates and combinations thereof.

24. The process according to Claim 19, wherein said precursor which simultaneously generates acid and said oxide is selected from the group consisting of $\text{Al}(\text{NO}_3)_3$, $\text{Al}(\text{SO}_4)_3$, silicic acid, silicon or aluminum halides and $\text{Al}(\text{CH}_3\text{COO})_3$.

25. The method according to Claim 18, wherein the content of said oxide in the separated zeolite product ranges from 1 to 50% by weight based on the amount of zeolite.

26. A process for preparing zeolitic catalysts in acid or ammonia form, which comprises:

(a) preparing an aqueous alkaline mother liquor containing alumina and silica precursors and optionally an organic templating agent;

(b) hydrothermally treating said mother liquor thereby obtaining a suspension containing zeolite crystals, silicates or amorphous silica aluminate and optionally (i) organic templating

agent and product generated by decomposition of the organic templating agent and optionally

(ii) alcohol derived by the decomposition of said silica and alumina precursors;

(c) treating the suspension of zeolite crystals in the crystallization mother liquor containing the crystals with an aqueous acid solution to change the pH to a pH ranging from 3 to 8;

(d) filtering or decanting the resulting mixture to separate the zeolite crystals;

(e) drying the crystals;

(f) calcining the crystals;

(g) effecting an ion exchange in the zeolite crystals in an aqueous solution containing an acid or ammonium salt;

(h) filtering or decanting the ion exchange zeolite crystals and subjecting the crystals to washing;

(i) drying the crystals; and

(j) calcining the crystals to remove ammonium ion therefrom in the event said ion exchange is conducted with ammonium salt and the acid form of the zeolite catalyst is required.

27. A process for preparing zeolitic catalyst in acid form, which comprises:

(a) preparing an aqueous alkaline mother liquor containing alumina and silica precursors and optionally an organic templating agent;

(b) hydrothermally treating said mother liquor thereby obtaining a suspension containing zeolite crystals, silicates or amorphous silica aluminate and optionally (i) organic templating agent and product generated by decomposition of the organic templating agent and optionally (ii) alcohol derived by the decomposition of said silica and alumina precursors;

(c) treating the alkaline suspension of zeolite crystals in the mother liquor with an acid until the suspension attains a pH ranging from 3 to 8;

(d) filtering or decanting the resulting mixture to isolate the zeolite crystals;

(e) exchanging the zeolite with an aqueous solution containing an acid or ammonium salt;

(f) filtering or decanting the zeolite crystals to effect separation thereof;

(g) drying the zeolite crystals; and

(h) calcining the crystals to remove residual templating agent and ammonium ion in the event the ion exchange reaction is conducted with an ammonium salt.

28. The process according to Claim 26, wherein said crystallization mother liquor contains zeolite preparing agents which are not transformed into a crystalline phase during the hydrothermal treatment.

29. The process according to Claim 27, wherein said crystallization mother liquor contains zeolite preparing agents which are not transformed into a crystalline phase during the hydrothermal treatment.

30. The process according to Claim 26, wherein in step (c), said suspension contains a material selected from the group consisting of clay, an oxide and an oxide precursor that generates an oxide by hydrolysis.

31. The process according to Claim 27, wherein in step (c), said suspension contains a material selected from the group consisting of clay, an oxide and an oxide precursor that generates an oxide by hydrolysis.

32. The process according to Claim 26, wherein said acid in step (c) is added in the form of a precursor which generates said acid and an oxide by hydrolysis.

33. The process according to Claim 27, wherein said acid in step (c) is added in the form of a precursor which generates said acid and an oxide by hydrolysis.

34. A process for preparing zeolitic catalysts in extruded form, which comprises:
extruding the product prepared by the method of Claim 26 in a mixture with a ligand.

35. A process for preparing zeolitic catalysts in extruded form, which comprises:
extruding the product prepared by the method of Claim 27 in a mixture with a ligand.